REMARKS

The Office Action mailed 30 June 2010, has been received and its contents carefully noted. Claims 1–27 were pending, claims 6, 12, 13, 16, 17, 20, 21 and 23–27 were withdrawn, and claims 1–5, 7–11, 14, 15, 18, 19 and 22 were rejected. By this amendment, claims 1, 2 and 7 have been amended. Support may be found in the specification and the claims as originally filed. No statutory new matter has been added. Therefore, reconsideration and entry of the claims as amended are respectfully requested.

Objection to the Specification

The Examiner objected to the specification for containing a browser-executable code.

Applicants respectfully submit that the objection to the specification may be properly withdrawn in view of the amendments herein. Applicants respectfully request that the Examiner hold any objections to the specification based on improper trademark usage in abeyance until an indication of allowable subject matter.

Priority Data

Applicants have amended the specification to provide the requisite cross-reference to related application data in order to perfect the priority claim. Applicants respectfully submit that a petition under 37 C.F.R. 1.78(a) is not required because the priority claim was recognized by the USPTO as indicated on the Official Filing Receipt mailed 27 June 2006.

Rejection under 35 U.S.C. 112, second paragraph

The Examiner rejected claim 2 under 35 U.S.C. 112, second paragraph, as being indefinite.

Applicants respectfully submit that the claims, as amended, are clear and definite. Therefore, the rejection under 35 U.S.C. 112, second paragraph, should properly be withdrawn.

Rejection under 35 U.S.C. 112, first paragraph

The Examiner rejected claims 1–3, 7–11, 14, 15, 18, 19 and 22 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner deemed that the specification does not provide written description support for the

entire scope of "variants" of anti-CD20 antibodies.

Applicants respectfully submit that the specification provides adequate written description support for the instant claims as amended. Therefore, the rejection under 35 U.S.C. 112, first paragraph, should properly be withdrawn.

Rejection under 35 U.S.C. 103(a)

The Examiner rejected claims 1–5, 7–11, 14, 15, 18, 19 and 22 under 35 U.S.C. 103(a) as being unpatentable over Wilbur (WO 00/02051) in view of Anderson (US 5,736,137). Specifically, the Examiner deemed that it would have been obvious to combine the components of Wilbur with the anti-CD20 antibody of Anderson to form a conjugate as claimed in order to treat B cell tumors.

Applicants respectfully urge that one of the novel and surprising features of the present invention is the possibility to bind several (on average 1.5 to 3.5) reagents to a single antibody or a fragment thereof. This leads to the ability to administer higher doses of an effector agent, thereby treating the given cancer or disease more efficiently. Another unexpected advantage of the claimed invention is that conjugates between the antibody and the reagents, which are not bound to cell tumor surfaces, are more stable in the blood circulation of patients. This increased stability substantially reduces the risk of harmful effects on tissues and organs before elimination from the body. Thus, the present invention provides an anti-CD20 conjugate as a medical agent, which is effective for treating diseases that express CD20 epitopes, such as lymphomas.

Prior to the present invention, less than 1% effector agents administered to a subject is normally bound to the tumor cells, and the remaining reagents continue to circulate around in the subject's blood for days or weeks, thereby often leading to adverse side effects. In addition, prior art compositions were unstable in the blood circulation.

Nowhere do the cited documents teach or suggest that a medical agent is set forth in claim 1 will allow delivery of high doses of effector agents where needed, e.g. tumor cells, without having an increased negative effect on healthy cells and tissues. Nowhere do the cited documents teach or suggest that the claimed medical agent will remain stable (intact) in the blood circulation over a considerable time such that the conjugate may be removed from the blood circulation once a sufficient amount has penetrated the tumor tissue (and has attached to

the tumor cells). Nowhere do the cited documents teach or suggest that these advantages are the result of anti-CD20 antibodies being conjugated with on average 1.5 to 3.5 reagents.

It should be noted that the presence of a multiple of reagents attached to each anti-CD20 antibody means that the antibody has more than one biotin molecule attached, which increases the adsorption rate to the extracorporeal filter and thereby reduces the time period needed for the removal of the medical agent from the circulation of the mammal to be treated. This is due to the fact that a higher flow rate can be used when passing the blood from the mammal through a device to which non-bonded medical agents will adhere via the biotin molecule. If several biotin molecules are present on the antibody, the flow rate can be increased. This will reduce the time period of exposure of the effector agent to critical healthy tissue, such as bone marrow, and attenuates the exposure of the patient to the extracorporeal procedure.

It should also be noted that the antigen binding properties of the anti-CD20 antibody are not significantly changed due to the binding to several, e.g. on average 1.5 to 3.5, reagents. Nowhere do the cited documents teach or suggest that the pharmacological properties of the antibody will not be adversely modified by its conjugation to several, e.g. on average 1.5 to 3.5, reagents.

In particular, nothing in Wilbur teaches or suggests anti-CD20 conjugates which retain the pharmacological properties of the anti-CD20 antibody, deliver high doses of effector agents to the target, and exhibit sufficient stability which allows subsequent removal from the blood circulation. Nothing in Wilbur teaches or suggests a need to have a conjugate stable in the blood circulation over a long time, a need to manufacture a conjugate with more than one reagent per antibody, which, as an additional advantage, permits a rapid removal of the antibody from the body fluid and thereby enables the use of high doses of radioactivity, and at the same time virtually retains the selectivity and affinity of the original non-conjugated antibody.

The disclosure of Anderson fails to alleviate the deficiencies of Wilbur. Specifically, Anderson simply discloses rituximab, an anti-CD20 antibody. Nothing in Anderson teaches or suggests that several reagents are bound or could be bound to one single antibody without destroying the pharmacological properties of the antibody.

Since the cited documents do not teach or suggest that the pharmacological properties of a single anti-CD20 antibody will be retained after conjugation to multiple, i.e. on average 1.5 to 3.5, reagents or its advantages, one of ordinary skill in the art would not have been motivated to

combine the disclosures of Wilbur and Anderson in order to obtain the claimed invention with a reasonable likelihood of success.

Therefore, the claimed invention is novel and unobvious and the rejection under 35 U.S.C. 103(a) should properly be withdrawn.

Request for Rejoinder

As it is believed that claim 1 is allowable, Applicants respectfully request rejoinder of the withdrawn claims which depend directly or indirectly on claim 1.

Request for Interview

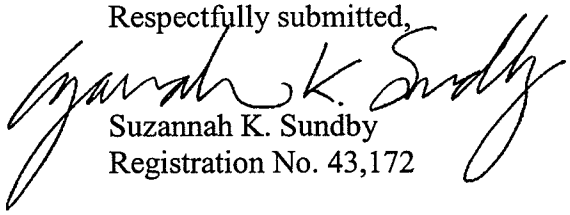
Either a telephonic or an in-person interview is respectfully requested should there be any remaining issues.

CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Therefore, it is respectfully requested that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Official action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. 1.136(a), and any fees required therefor are hereby authorized to be charged to **Deposit Account No. 024300, Attorney Docket No. 033972.013**.

Respectfully submitted,



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